1. GENERAL

1.01 This section contains the specific lubrication procedures for the 28 single-magnet nontyping reperforator used as a component in various types of 28 teletypewriter apparatus. The material herein, together with the section containing the general lubrication instructions on teletypewriter apparatus, provides the complete lubrication information for maintenance.

1.02 This section is reissued to revise the lubrication information in accordance with the change authorized for this apparatus by P98. series Bell System Practice listed at the end of the section, to include other authorized revisions and additions so as to bring the section generally up to date, and to change the title. Since this is a general revision, the arrows ordinarily used to indicate changes have been omitted.

1.03 The lubrication symbols used herein are the same as those in the general section. However, the symbol 0 is used in this section to mean only one drop of oil. Symbols, such as 02 and 04, are used to indicate respectively two or four drops of oil.
1.04 The apparatus should be lubricated before being placed in service as specified in the section covering the preparation of teletypewriter apparatus for installation. After a few weeks in service, it should be relubricated to make certain that all specified points have lubricant. Thereafter, because of varying conditions at each station, the apparatus should be lubricated as often as specified by local instructions. The following lubrication interval is suggested as a guide for use under normal operating conditions:

(a) Lubricate every 500 hours of operation or every six months, whichever occurs first.
2.02 Selector Mechanism

- BEARING GUIDE SLOTS (5 SLOTS)
- PUSH LEVER GUIDE
- SAT FELT WICK
- SELECTOR
- ENGAGING SURFACE TIP OF ARMATURE EXTENSION
- ENGAGING SURFACES (5 LEVERS)
- PUSH LEVERS
- GUIDE SLOT MARKING LOCK LEVER
- OIL CUP SELECTOR LUBRICATOR ASSEMBLY
- GUIDE SLOTS SELECTOR AND PUSH LEVERS
- HOOKS - EACH END (14 SPRINGS)
- SELECTOR LEVER SPRINGS
- BEARING GUIDE SLOTS SELECTOR AND LOCK LEVERS
2.03 Selector Cam and Clutch Mechanism

- 04 INTERNAL MECHANISM
- 02 OIL HOLES - 2
- 02 CAMMING SURFACES
- 02 CAMMING SURFACE
- 02 SELECTOR CAM SLEEVE
- 04 SELECTOR CLUTCH
- SAT FELT WICK
- CAM SLEEVE BEARING
- CLUTCH DISK
2.04 Range Finder Mechanism

- **G TEETH**
- **RANGE FINDER KNOB ASSEMBLY**
- **02 ENGAGING SURFACE**
- **CLUTCH LATCH LEVER**
- **SAT FELT WASHER**
- **CLUTCH LATCH LEVER**
- **0 HOOK - EACH END**
- **LATCH LEVER SPRING**
2.06  Punch-pin and Retractor Bail Mechanism for Chadless Tape

- Guides and Notches (3 Places)
- Punch Pins
- Hooks—Each End (4 Springs)
- Rocker Bail Spring
- Springs
- Retractor Springs
- Bearing Surface (2-Front & Rear)
- Retractor Bail
- Retractor Bail
- Felt Washers (2-Front & Rear)
2.07 Punch-pin Mechanism for Fully Perforated Tape

- SLIDING SURFACE (6) (UPPER GUIDE)
- PUNCH PIN
- SLIDING SURFACE (6) (LOWER GUIDE)
- PUNCH PIN
- SLIDING SURFACE (6) PUNCH SLIDE GUIDE
- HOOKS-EACH END SPRING
2.08 Feed-wheel Mechanism for Chadless Tape and Fully Perforated Tape

- Bearing Surface
- Ratchet Teeth (2 Places)
- Feeder Wheel Knob
- Feeder Wheel
- Feeder Wheel
- Die Wheel
- Feeder Wheel
- Felt Washer
- Felt Washer
- Felt Wicks (2)
- Spring
- Spring
- Hooks—Each End (2 Springs)
- Felt Washer
- Felt Washer
- Feeder Pawl
2.09 Tape-shoe Mechanism for Chadless Tape and Fully Perforated Tape

- Bearing Surface
- TAPE SHOE
- Bearing Surface (2)
  (Front and Rear)
- TAPE SHOE ARM
2.10 Punch-slide Mechanism for Chadless Tape and Fully Perforated Tape

- **GUIDE SLOTS**
- **HOOKS - EACH END (5 SPRINGS)**
- **ENGAGING SURFACES (5 LATCHES)**
- **BEARING SURFACE (5 LATCHES)**
- **ENGAGING SURFACE (5)**
- **PUNCH SLIDE AND DEPRESSOR SLIDE GUIDE**
- **PUNCH SLIDE SPRINGS**
- **PUNCH SLIDE LATCH**
- **PUNCH SLIDE LATCH**
- **PUNCH SLIDE LATCH SPRING**
- **RESET BAIL**
2.11 Rocker Arm Mechanism for Chadless Tape and Fully Perforated Tape
2.12 Reset-bail Mechanism for Chadless Tape and Fully Perforated Tape

- SAT FELT WASHER (2 WASHERS - FRONT & REAR)
- TOGGLE LINKS
- ENGAGING SURFACE
- RESET BAIL
- SAT FELT WASHERS (2 WASHERS - FRONT & REAR)
- RESET BAIL
- SAT FELT WASHERS (2 WASHERS - FRONT & REAR)
- TOGGLE BAIL
- SAT FELT WASHERS (2 WASHERS - FRONT & REAR)
- TOGGLE BAIL
28 SINGLE-MAGNET NON-TYPING REPERATOR

MAIN-shaft Mechanism with 1-cycle or 2-cycle Function Cam
2.14 Clutch-trip Mechanism of Main Shaft with 2-cycle Function Cam

- SAT FELT WASHER
- SAT FELT WICK
- 0 HOOK - EACH END
- 0 PIVOT
- 02 ENGAGING SURFACE
- 02 ENGAGING SURFACE
- CLUTCH TRIP SHAFT
- CLUTCH LATCH LEVER
- LATCH LEVER SPRING
- CLUTCH TRIP LEVER
- CLUTCH LATCH LEVER
- CLUTCH TRIP LEVER
Main-shaft Mechanism with 2-cycle Function Cam

- G TEETH
- MAIN SHAFT GEAR
- 02 BALL BEARINGS (2 BEARINGS)
- MAIN SHAFT BEARINGS
2.16 Main-shaft Mechanism with 1-cycle or 2-cycle Function Cam

- Function Cam Needle Bearing Sleeve (3)
- Both ends of Sleeve and Oil Hole in Sleeve
- Main Shaft Bearing
- O2 Cam Surfaces (Each Cam)
- Selector Cam
- Roller Pivot
- Function Cam
- Main Shaft Driven Gear (If unit is so equipped)
2.18 Rocker-bail Mechanism

- SAT FELT WASHER
- 02 ROLLERS - 2
- 02 GUIDE SLOT
- 02 PIVOT
- SAT FELT WICK - USE OIL HOLE
- DRIVE LINK
- ROCKEBAIL ROLLERS
- ROCKEBAIL GUIDE
- ROCKEBAIL SHAFT
- ROCKEBAIL SHAFT
2.19 Main-triplever Mechanism

- ENGAGING SURFACE
- CLUTCH RELEASE
- GUIDE SLOT
- CLUTCH RELEASE BACKSTOP
- FELT WICK
- CLUTCH RELEASE BACKSTOP
- PIVOT
- CLUTCH RELEASE
- PIVOT
- MAIN TRIP LEVER
- HOOKS - EACH END (3 SPRINGS)
- MAIN TRIP LEVER SPRINGS
- ENGAGING SURFACES
- MAIN TRIP LEVER
- PIVOT
- TRIP CAM FOLLOWER LEVER
3. VARIABLE FEATURES

3.01 Backspace Mechanism for Chadless Tape and Fully Perforated Tape and Main Shaft
3.02 Main-shaft and Jack-shaft Mechanisms (2-shaft Unit)
3.03 Manual Backspace Mechanism for Chadless Tape

- 02 BEARING SURFACE (REAR) - RAKE SHAFT
- G GEAR TEETH - GEAR SEGMENT
- 02 BEARING SURFACE - FEED PAWL
- 0 HOOKS-EACH END - PAWL SPRING
- G CONTACT SURFACE - FEED PAWL
- 0 HOOKS-EACH END (3 SPRINGS) - SPRING
- 0 BEARING SURFACE - BELL CRANK
3.04 Power-drive Backspace Mechanism for Chadless Tape
3.05 Power-drive Backspace Mechanism for Fully Perforated Tape

- HOOKS - EACH END
- FEED PAWL SPRING
- BELL CRANK SPRING
- FEED PAWL
- FEED PAWL
- FEED PAWL
- BELL CRANK
- NUT, SHOULDER
- BEARING SURFACE
- BEARING SURFACE
- BEARING SURFACE
Power-drive Backspace Mechanism for Fully Perforated Tape

- Bearing Surface
- Sliding Surface
- Rotating Surface
- Hooks - Each End
- Link
- Eccentric Drive Arm Fork
- Engaging Surface
- Latch
- Eccentric Arm
- Extension Latch Spring
- Hitches - Each End
- Armature Bail Spring
- Armature Bail
3.08 Timing Contact Mechanism

- CONTACTING SURFACE
- HOOKS - EACH END (2 SPRINGS)
- SAT FELT WICK
- SAT FELT WASHERS
- SAT FELT WASHER
- CONTACT ACTUATING BAIL
- CONTACT ACTUATING BAIL SPRINGS
- CONTACT ACTUATING BAIL SPRINGS
- CONTACT ACTUATING BAIL SHAFT
- CAM FOLLOWER ARM
3.09 Code-reading Contact Mechanism
3.11 Automatic Noninterfering LTRS Tape Feed-out Mechanism

- SAT FELT WASHER
- SAT FELT WASHER
- DRIVE LINK
- DRIVE LINK
- O HOOKS-EACH END
- SPRINGS (3)
- O2 BEARING SURFACE
- RELEASE LEVER
- O2 BEARING SURFACE
- SAFETY LATCH
- G CONTACT SURFACES (2)
- LATCH LEVER
- O2 BEARING SURFACES (2)
- RESET CAM FOLLOWER
3.12 Remote-control Noninterfering LTRS Tape Feed-out Mechanism

**Note:** For general location of this mechanism refer to 3.10.
3.13 Remote-control Noninterfering LTRS Tape Feed-out Mechanism

Note: For general location of this mechanism refer to 3.10.
3.14 Remote-control Noninterfering LTRS Tape Feed-out Mechanism

Note: For general location of this mechanism refer to 3.10.
3.15 Automatic and Remote-control Noninterfering LTRS Tape Feed-out Mechanisms

- HOOKS-EACH END
- BEARING SURFACE
- SPRING
- RELEASE ARM
- SPRING
- BEARING SURFACES (2)
- LATCH LEVER
- TIME DELAY LEVER
- HOOKS-EACH END
- CAMMING SURFACE
- TIME DELAY CAM
- BEARING SURFACE
- TIME DELAY CAM
Automatic and Remote-control Noninterfering LTRS Tape Feed-out Mechanisms

- CONTACT SURFACE
- CAMMING SURFACE
- BEARING SURFACE
- HOOKS-EACH END
- BEARING SURFACES
- RELEASE ARM
- DRIVE CAM
- ROLLER
- SPRING
- BEARINGS (FRONT AND REAR)
Automatic and Remote-control Noninterfering LTRS Tape Feed-out Mechanisms

- HOOKS-EACH END
- SPRINGS (2)
- BEARING SURFACES (PLACE BETWEEN RATCHETS)
- RATCHETS (2)
- TEETH
- RATCHETS (2)
- HOOKS-EACH END
- SPRING
- PIVOT POINT
- REAR CHECK PAWL
Automatic and Remote-control Noninterfering LTRS Tape Feed-out Mechanisms

- HOOKS-EACH END
- SPRING
- PIVOT POINT
- RESET BAIL LATCH
- PIVOT POINT
- RESET BAIL LINK
- CONTACT SURFACES (2) RESET BAIL
- CONTACT SURFACE
- RESET BAIL
- TRIP LEVER
- CONTACT SURFACE
- RESET BAIL LINK
- HOOKS-EACH END
- SPRING
3.19 Manually Operated Interfering LTRS Tape Feed-out Mechanism

![Diagram of the Manually Operated Interfering LTRS Tape Feed-out Mechanism]

4. ASSOCIATED BELL SYSTEM PRACTICE

4.01 The following Bell System Practice provides additional information that may be required in connection with this section.

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CHANGES AUTHORIZED BY P98. SERIES BELL SYSTEM PRACTICE

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